Abstract of the Disclosure

As for the specific analyzed object, the spectral profile is prepared. The spectral profile is differentiated and the two-dimensional derivative plot wherein at least one axis denotes the differentiated value is prepared, and at least one component band is estimated based on the characteristic information including the local minimum and the local maximum in the said two-dimensional derivative plot.

The component bands are estimated which construct spectral profile of the analyzed object by iterating the estimation of other component bands in the same procedure and by estimating component bands in order as for the profile with estimated component bands removed from the original spectral profile or the two-dimensional derivative plot.

Further, after estimating the component bands, the band parameter values are so improved as to coincide the specific estimated component bands with complementary estimated component bands with all the component bands removed except for the specific component bands estimated from the original spectral data. The total sum of the distances of the iso-wavenumber lines and the symmetry of the two-dimensional derivative plot are employed as criteria of the coincidence.